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S C H E M E

For the Better Supplying this

M E T R O P O L I S

With SWEET and WHOLESOME

W A T E R

FROM THE

R I V E R C O L N.

Most humbly offered to the CONSIDERATION of

BOTH HOUSES OF PARLIAMENT,

THE NOBILITY, GENTRY,

And INHABITANTS of the WEST END of the TOWN in particular.

By W. EFFORD, Gent.

L O N D O N :

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FEBRUARY 25, 1764.





A

S C H E M E

For the better Supplying this METROPOLIS with Sweet
and Wholesome WATER from the River COLN.



THE Health and Convenience of the Inhabitants of
London and *Westminster*; the Frequency and dread-
ful Calamities of Fires; the aparent Want of
Water at the West End of the Town at such Times;
the Increase of New Buildings; the exorbitant
Prices now paid to the *New River*, *Chelsea*, and *York-Buildings*
Companies; besides their Inability to supply the Town adequate
to the Demand: These and many other Considerations have
induced the Author of this to form a Plan, extensive in its
Progress, and replete with the utmost Utility to this Metropolis,
creating a lucrative, certain and noble Estate, and which will for

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ever reflect immortal Honour on the Promoters, by employing a great Number of our Disbanded Forces, and Handicraft Poor, who are now almost perishing for Want of Bread. A Work indeed so necessary at this Time, at the Close of a long, tedious, and bloody War, Stagnation of Trade, and universal, advanced Prices of the Necessaries of Life; the bare Mention whereof, 'tis presumed, is sufficient.

THE Author has not only availed himself of the Knowledge, Motive and Design of an Affair of this Nature proposed in 1721, when it was proved in the Honourable House of Commons to be practicable; but has (at a considerable Expence) traced out the several Branches of this River with the different Parts adjacent thereto, and likewise taken an actual Level of the Ground contiguous to the River home to *St. Mary le Bone* Turnpike; by which it appears, on a very accurate Calculation, there is a Fall of upwards of thirty-two Feet, being considerably more than the *New River*, (or indeed wanted) which Circumstance, so much in its Favour, can admit of no Objection in conveying it to Town.

IN order therefore, to illustrate this Scheme more fully, I shall endeavour, by Way of Question and Answer, to set forth the most material Objections, that were raised against it in 1721. Likewise what hath been insinuated since the first Promulgation of this revived Scheme (which has been in agitation about two Years) by several Individuals interested in this Affair.

F I R S T.

F I R S T.

THERE are at present erected on this River, and its Branches, particularly, at, and near *Uxbridge*, *West-Drayton*, and further down the Streams, several Grift, Paper, Oil, and Powder-Mills; the converting (say they) a Portion of Water, for the Uses mentioned in this Plan, may prevent their working, it may likewise effect the Navigation of the River *Thames*, at *Laleham*, *Chertsey*, between *Staines Bridge* and *Colnie Ditch*, where, in dry Seasons*, is a considerable Want of Water, at those Places, for West Country Barges to pass; likewise this Diminution may be productive of great Loss to the Proprietors of those Mills, and, in some Measure, hinder the People of *Uxbridge* from a Supply of Flour, &c. for the Use of that Town, &c.

A N S W E R.

TIS true there are several Mills now on the Main and Branches of this River; but this will, by no Means, retard their working, to the Prejudice of the Proprietors, or the Trade of *Uxbridge*. The Portion of Water intended to be severed from the whole Body of the River *Coln*, shall not exceed 2500 Tons per Hour, which is somewhat more than one Fifth of the

* This is to be understood only in the dry Seasons, at other Times there is no want, either for the Mills or Navigation of the *Thames*.

Whole; the Remainder will suffice for every useful Purpose that is now performed. In order, therefore, to answer this Objection fully, and to satisfy ever Individual, that may be interested therein (either as Proprietor of Mills, Fishery, or any other Object which is not particularly mentioned here,) an adequate Compensation will be paid by the Subscribers to this intended Scheme, in such Manner as the Wisdom of the Legislature shall appoint.—Further, to remove all Discontents to those People, the Subscribers will erect (if wanted) a Mill, or Mills, at their own Expence, on the intended Canal, for the Use of those whose Interest is effected, at a small annual Rent, (or as the Wisdom of the Legislature shall think proper) which is easy to be done at several Places, where it is found most convenient, there being a Fall of * thirty-two Feet, from the first proposed Head, or Reservoir, to Mr. *Welling's* Farm-House, by *St. Mary le Bone* Turnpike. †

AGAIN, as this River is divided into four different Branches, where they empty themselves into the *Thames*, (to wit) at *Isleworth*, *Hampton-Court*, *Staines-Bridge*, and at *Raisbury*, it cannot effect the Navigation of the *Thames*, as beforementioned, not Half an Inch ‡ from the Surface to the Bottom; neither is

* This Fall of thirty-two Feet will be sufficient to form three Locks on the Canal, allowing six Feet Head for each Lock; two Sets of Mills may be erected to each, that shall be equal to that situated by *Lea-Bridge*, near *Clapton*, or any of those now occupied on the River *Coln*.

† This Level was taken by the Author and proper Assistants, in the Summer of the Year 1763, with the greatest Care and Accuracy.

‡ To prove this, let any Person consider a Body of Water not exceeding 2500 Tons per Hour, falling into the *Thames*, at four different Places; first at *Isleworth*, there

is the *Thames* deficient in Water ; that is not the Cause.— Confining its Course within proper Bounds, scouring the Bed, and clearing Obstructions, would remove the Evil, and effectually preserve the Navigation of that River.

WHATEVER Deficiency, or Obstructions in the Navigation of the *Thames*, further Westward than *Colnie-Ditch*, (as above) are entirely out of the Question in this Affair ; yet not difficult to remove, if proper Means were applied.

FURTHER, this Canal will not effect the Mills in its future State ; because the Quantity of Water wanted on this Occasion, will not amount to so much as first proposed, there being several fine Springs * on the Road to be taken in, which will greatly augment it in its Course, and is a considerable Article in favour.

there the Tide flows up to it ; next at *Hampton Court*, then at *Staines Bridge*, and last at *Raisbury*, to be equally divided, What Effect will so small a Diminution, (in Comparison of the River *Thames*) have, by severing that Quantity from the Whole ? The idle Whim of the ignorant Barge-masters, setting forth the great Want of Water at *Chertsey*, *Laleham*, &c. deserves no Notice ; since the River *Thames* contains, at those Places, ten Times more Water than is sufficient for their Navigation, if proper Care was taken of the River, as before-mentioned. In order to illustrate this important Subject, I have annexed a correct Map of the River *Coln*, and those four Branches that empty themselves into the *Thames*, by which it will appear the little Foundation there is for such a Report, since this Quantity of 2500 Tons per Hour will be separated into four Parts, consequently its Effects will be diminished in Proportion on the whole accordingly.

* By *Rislip Moor* is a fine Spring, never dry, and is sufficient to fill a five Inch Bore. Another likewise at the *Black Potts* on the same Common. A large Moat of Water at *Edgston*, thirty Feet wide, supplied by Springs. Also two or three large Springs near *Barn-hill*.

S E C O N D O B J E C T I O N.

The *New River Company*, who are opulent * and powerful, will tell you, they can supply all *London* with Plenty of Water. That this Scheme is calculated to lessen their Profits, and consequently lower the Price paid for it. That in 1721, when this Scheme was in Agitation, in order to defeat those public-spirited Gentlemen who proposed it, the Company were at 20,000*l.* Expence in laying on three Mains from the *New River Head* to the West End of the Town, in erecting a large Reservoir above theirs at *Sadler's-Wells*, and in erecting an Engine to throw up the Water from the latter to the former, to get a sufficient Fall for that Purpose.

A N S W E R.

THE *New River Company* at that Time did put themselves to a great Expence (in Fact) to counteract and evade the Necessity there then was for a better Supply of Water; but the Public were faddled with that Expence by the Prices being raised in Proportion thereto; but now the Case is quite different; the vast Increase of ‡ New Buildings at the West End of the Town, the

* The Opulency of that Body, may be nearly computed by the immense Price the Shares now are estimated at, no less than 7500*l.* per Share.

‡ In the single Parish of *St. Mary le Bone*, there have been, within these few Years, upwards of 2500 new Houses built, besides a vast Number now erecting, which in a Year or two will be compleatly joined to that Parish, &c. &c. Nor will their laying on a new Main for the Purpose of better supplying that Part of the Town, be sufficient to answer the Necessity there is for Plenty of Water: The Distance being increased, so much more in Proportion will the dreadful Effects in Cases of Fires be felt; neither is the Nature and Composition of those Buildings proof against devouring Flames, as daily Experience convinces us.

Distance of the *New River* Head cannot be altered, if they could supply the Inhabitants with enough for necessary Uses (tho' 'tis known they cannot) yet in Cases of Fires by Night their * Water is generally an Hour and an Half, or two Hours before it can arrive at the Place wanted. Witness the late melancholy Fires in *Upper-Brook-Street*, *Denmark-Street*, &c. &c. The same Argument holds good in regard to *Hampstead* and *Chelsea* Water-Works.—Further, this Scheme, if duly considered by that Company, is far from injuring them as to Profits. 'Tis notorious, that the *London* Water-Works are deficient in their Supply, arising from the late Alteration of the Bridge. On this Principle they may supply that Defect, and the City be better provided than heretofore. Again, if the intended Reservoir in *Upper-Moor-Fields*, and that lately finished at *Clapton*†, takes Place, this will naturally require more Water. These, together with the Deficiency of the Bridge-Works, will compensate for the Diminution of their Rents at the West End of the Town.—Another Argument demonstrative in Favour of this Plan.—If the City wants more Water for their ordinary Supply, or, as a Preventive of the shocking Calamities of Fire, how much more do the Inhabitants of the West End of the Town, where the Royal Residence is

* 'Tis usual every Night to turn off the Water from the Mains, to prevent bursting the Pipes, which would infallibly be the Case, was there not Room for the circumambient Air to pass through them.

† The beautiful Reservoir, completed at *Clapton* by a public-spirited Gentleman, is a Proof that the *New River* Company were not very forward to introduce any new Plan, since I am very certain it was in their Power to have supplied the Inhabitants of that Place at an easy Rate.—If such an opulent Body, whose Duty it more immediately concerns, are dilatory and remiss in their public Capacity, no Reason then can be fairly assigned against a Scheme of this Nature, which tends to oblige the Public.

seated, the Chief of the Nobility and Gentry in the Kingdom ; not to mention the two Houses of Parliament, Courts of Justice, &c. that are in some Measure liable to the dreadful Effects of devouring Flames ?

T H I R D O B J E C T I O N .

It may be insinuated, the great Expence of cutting this Canal will over-ballance the Utility, since Engines may be erected on several Parts of the *Thames* for the same Purpose, as what is intended by this Scheme.

A N S W E R .

No Doubt Engines may be erected ; but not at so little Expence as imagined ; the continual Wear and Tear is a heavy Burthen upon the Profits, exclusive of Coals and Timber, Accidents, &c. —The Benefit of twenty Engines is no Comparifon to a Work of this Nature*.—A Work once performed, and in the Manner proposed by this Scheme, will stand the Test of Ages, with very little Expence. Another material Consideration is, the employ-

* The Expence of performing this noble Work, is a Matter of little Consideration, in Comparifon to the public Utility. All public Works are attended with Expence. His Grace the Duke of *Bridgwater*'s grand Canal, was attended with an extraordinary Expence at first, but its numerous Benefits accruing to the Community, over-balances and reflects immortal Honour on his Grace's public Spirit, in perfecting a Work of such a Nature. If I am not misinformed, there is a Design now on Foot, to extend this Navigation, by a Cut of ten Miles to *Stockport*, in *Cheshire*, which is to join his Grace's, as above.

ing of our disbanded Forces, and poor distressed Manufacturers ; an Object in itself so laudable and praise-worthy, that adds Weight and Encouragement to the Undertaking : Upon the Whole, this Scheme must naturally appear, to every unprejudiced Reader, abounding with innumerable Advantages to this Metropolis, and the Community in general.

F O U R T H O B J E C T I O N.

'Tis possible when this Scheme is found to be patronized by the First Personages of the Kingdom, the Nobility, and the Members of the House of Commons, the *New River* Company will be subscribing a Sum of Money among themselves, and applying for an Act of Parliament next Sessions for the same Purpose as this.

A N S W E R.

THE Wisdom of the Legislative Power will (no Doubt) prevent a Motion of this Nature : Because it would naturally involve the Public in a worse Condition than they are at present ; therefore 'tis humbly presumed a Monopoly is the chief Point to be guarded against in Places so populous as the Cities of *London* and *Westminster*.

SHOULD

SHOULD this be the Consequence, every impartial Judge, I hope, will think that a New Company would not only be a Check upon the others, but also attended with the greatest Advantages to the Public ?

HAVING thus far given my Opinion of the Objections that at present seem to occur, I shall proceed to the Outlines of the Plan, in order to trace the Path through the several Lands where the intended Canal is to be cut.

F I R S T.

THE most convenient and proper Place for a Beginning, may be taken at or near a Place called *Denham* * *above the Long Meadows, on Harefield Marsh*, about two Miles above *Uxbridge*, where the main Part of the River runs by, (as may be seen by the Plan annexed.) Here should be a small Reservoir, or Head of Water, about six Feet high, in this to *fix* a proper *Cylinder*, of eleven and one Quarter Inch Bore, which will emit a Quantity, not exceeding 2500 Tons per Hour §.

* By a very accurate Measurement and Calculation of the Quantity of Water this whole Body of the *River Coln* contains at this Place, in the dryest Season that has been known these forty Years, exceeds (at the Rate of) 8000 Tons per Hour.

§ This Calculation being a Matter of great Consequence, I was determined not to trust to my own Judgment, and therefore applied to the ingenious Mr. *Samuel Clark*, (Author of *An Easy Introduction to the Mechanics*, and several other valuable Pieces,) who was kind enough to investigate and confirm the above.

S E C O N D L Y.

S E C O N D L Y.

To convey this Portion of Water in a Canal of thirty Feet wide, and ten deep, for the Purpose of making it navigable, (or should that be deemed too expensive, to be conveyed in a Canal of fifteen Feet broad, and six deep, for the Purpose only of better supplying this Metropolis with sweet and wholesome Water) to *St. Mary le Bone* Turnpike, as beforementioned, which will open a Communication in many Branches of Trade, with the Inhabitants of *Uxbridge*, *Rickmersworth*, *Watford*, and contribute greatly to facilitate very material Advantages to the interior Parts of *Middlesex*, *Buckinghamshire*, and *Hertfordshire**, likewise enrich those Lands through the several Parishes whereon it passes, particularly *Rislip*, *Pinner*, *Harrow the Hill*, &c. which last mentioned Parishes contain Abundance of waste Ground and Commons, as *Rislip-Moor*, *Pinner-Common*, and *Harrow-Weald*; now of little or no Benefit to their Owners, or the Public in general. The many navigable Canals in foreign Countries, (as well as those in *England* of late Years) prove beyond Contradiction their Utility.—Especially in a trading Kingdom as *Great Britain*.

* Particularly in extending this Navigation from *Uxbridge* to *Rickmersworth*, *Watford*, *St. Alban's*, and even to *Redbourn*, on that Branch. And likewise continuing it, on the other Branch (of this River) into *Buckinghamshire*, as far as the Nature of the Ground will admit; (the Advantages resulting from this extensive Communication, will be very great. By conveying all the common Necessaries of Life, that are the Produce of those interior Parts: together with *Corn*, *Hay*, *Straw*, &c. &c. to this *Metropolis* at an easy Rate; such exorbitant Prices now paid, and are still increasing, renders the opening new Channels of Supply daily more apparent.) This Extension is intended, by the Promoters of this Scheme, if not prevented by any unforeseen Accidents.

THIRDLY.

FROM thence between the *Barriers* and the *Common*, near a Place called the *White Well Springs* on *Rislip Moor*, which contain very pure Water, and may be taken in (if wanted) with one more at the Sign of the *Black Potts*.

FOURTHLY.

FROM thence through the *Common* near the Corner of the *Park*, thence by the *New Pond*, and so to the Beginning of *Pinner Common*, and through it to *Hatch End*, *Edgstone Lane*, and *Wolf's Green*.

FIFTHLY.

FROM thence to *Edgstone Green*, where there is a large Moat of Water, of thirty Feet wide, and so on to *Harrow Lane*, approaching as near the Base of *Harrow-Hill* as possible it will permit, leaving *Harrow* on the Right, to *Church Field* and *Common Field*, to *Kenton Green*.

SIXTHLY.

FROM thence through the Fields leading to *Preston*, crossing a Brook of Land Water to *Preston Green*, and so near *Barn-Hill*, where there are two or three Springs of pure Water; thence by the Wood, and through the Lane on to a Brook at *Kingsbury Bridge*.

S E V E N T H L Y.

From thence through or near *Needsdon Lane* to *Needsdon*, by *Scherby Green*, over the *Common Field* leading to *Wilsdon Green*, *Meeps Lane* and *Kilburn*.

E I G H T H L Y.

FROM thence to *St. John's Wood* through the *Path Field* to *Mr. Welling's Farm House* by *St. Mary le Bone Turnpike*, where the intended Reservoir is to be made.

The Situation of this Ground is most happily adapted for a Work of this Nature. From this Place you command the entire West Part of the Town from the *Fleet-Ditch* to the Reservoir in *Hyde-Park*, which takes in *Lincoln's-inn-fields*, *Bloomsbury*, *Soho*, *Golden*, *Cavendish*, *Hanover*, and *Berkeley-Squares*, all *May-Fair*, *Piccadilly*, and through *St. James's* to *Whitehall*, *Westminster-Hall*, &c. on which the Water may be carried to any Height.*

* May likewise Supply all those New Buildings near *Tyburn*, particularly the New Square now erecting, and all those that are intended to join *St. Mary le Bone*, &c. &c.

AND

AND as a further Improvement, 'tis propos'd to erect a Reservoir in the Centre of each of the aforementioned Squares, with four Engine Pumps fixed by the Walls round the Reservoir, which will be instantly ready, in Cases of Fire, to play before the Engines arrive.

I have thus attempted to give a general Idea of this Scheme, in which I am certain every candid Person will excuse any Inaccuracy, when they consider the Goodness of the Intention; to a Commercial Nation, it would be needless to enumerate the many Advantages of opening new Communications from one Place to another, by which the Productions of the one may be convey'd at a cheaper Rate than otherwise to the other, and the making new Canals in the interior Part of any Kingdom, is only imitating in little, what the wise Creator of the World did in large, when he in a Manner united the most distant Lands by the Means of intervening Seas.



Explanation of the MAP of the River Coln from Denham to the THAMES.

- A. Denham where the whole River unites
- B. Raisbury where the Colnbrook Stream enters the Thames
- C. Stains where the Heathem and Stannwell Streams enter the Thames
- D. The Kings River through Bushey-Park enters the Thames by Hampton Court
- E. The Duke of Somerset's Cut to Isenworth where it enters the Thames

